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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,469	02/08/2002	Michael David Bentley	34848/234789	1045
826	7390	01/07/2004	EXAMINER	
ALSTON & BIRD LLP BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000			METZMAIER, DANIEL S	
			ART UNIT	PAPER NUMBER
			1712	

DATE MAILED: 01/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. 10/071,469	Applicant(s) BENTLEY ET AL.	
Examiner Daniel S. Metzmaier	Art Unit 1712	

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 27-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 14-20, 29 and 30 is/are rejected.
- 7) ☒ Claim(s) 12, 13, 27 and 28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claims 1-20 and 27-30 are pending.

Claim interpretation

1. The set forth a polymer derivative having the structure R-O-POLY-R' and a polymer having the structure R-O-POLY-O-R and POLY is defined as a water-soluble and non-peptidic polymer. For claims, such as claim 1, which do not more specifically define the polymer, said polymers read on polymers that may contain further substituents, such as "-O-CH₂)_n-CHO". Please contrast with claim 4, which more clearly defines "POLY".

Furthermore, several of the claims define R as an alkyl or an aryl group without setting forth any structure. Said limitation is deemed to include aryl groups, such as dimethoxytrityl ethers, which is an aryl group. Claims are given their broadest reasonable interpretation in view of the specification during prosecution. See MPEP 2111.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-11 set forth an overlapping definition for the definitions of R or R' but do not define both R and R' because applicants define "groups" as synonymous with "functional group", "moiety", "active moiety" and "reactive

site". See page 10, line 3 et seq for application definition of "group". Contrast with claim 12 containing a more specific recitation of group.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-9 and 14-15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Phillips et al, 5,298,410, esp.

Example 1-3, 6 and 7; and column 6, line 53, to column 7, line 19; or Snow et al., 5,532,154, esp. Examples 1, 3, 4, 7 and 8. The claims are silent regarding the concentrations of the polymer derivatives having the structure R-O-POLY-O-R and said claims read on trace amounts.

To the extent the claims differ in the purity of the components, the claims are silent regarding the concentrations of the polymer derivatives having the structure R-O-POLY-O-R and said claims read on trace amounts. The mere purity of a product, by itself, does not render the product unobvious. *Ex parte Gray*, 10 USPQ2d 1922 (Bd. Pat. App. & Inter. 1989). See MPEP 2144.04(VII).

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 1-6, 8-9, 11, 16-20 and 29-30 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-21 of U.S. Patent No. 6,362,254. Although the conflicting claims are not identical, they are

not patentably distinct from each other because the stated instant claims read on, or at least overlap, the claims of the '254 patent.

The claims are silent regarding the concentrations of the polymer derivatives having the structure R-O-POLY-O-R and said claims read on trace amounts. The mere purity of a product, by itself, does not render the product unobvious. *Ex parte Gray*, 10 USPQ2d 1922 (Bd. Pat. App. & Inter. 1989). See MPEP 2144.04(VII).

10. Claims 1-8 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-21 of U.S. Patent No. 6,495,659. Although the conflicting claims are not identical, they are not patentably distinct from each other because the stated instant claims read on, or at least overlap, the claims of the '254 patent. The claims are silent regarding the concentrations of the polymer derivatives having the structure R-O-POLY-O-R and said claims read on trace amounts.

The claims are silent regarding the concentrations of the polymer derivatives having the structure R-O-POLY-O-R and said claims read on trace amounts. The mere purity of a product, by itself, does not render the product unobvious. *Ex parte Gray*, 10 USPQ2d 1922 (Bd. Pat. App. & Inter. 1989). See MPEP 2144.04(VII).

Allowable Subject Matter

11. Claims 12-13 and 27-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not reasonably show the claimed compositions employing the structures set forth claims 12-13 and 27-28.

Response to Arguments

13. Applicant's arguments filed September 25, 2003 have been fully considered but they are not persuasive.

14. Applicants (pages 9 and 10) assert the Philips et al and Snow et al references are directed to low diol polyalkylene-oxide containing compositions and that said compositions lack the R-O-POLY-O-R structure. This has not been deemed persuasive for the following reasons. Initially the claims do not set forth any claimed concentration levels for the R-O-POLY-O-R compounds. Said claims would clearly read on trace amounts expected in the reaction processes during the alkylating processes. As pointed out, the R-O-POLY-O-R compounds are essentially inert in the compositions and would have been expected to be tolerated and omitted from any recitation in the literature as a component of the composition.

Furthermore, several of the claims define R as an alkyl or aryl group. Said broad definition would read on such groups as a dimethoxytrityl group.

Regarding claim 16 and those dependent thereon. Claims that broadly define the POLY as a water-soluble polymer and non-peptidic polymer do not exclude polymers having other substituents. The claims broadly require the R group defined as either an alkyl or aryl group. Also, attention is directed to page 10, line 3 et seq, of the


specification wherein "group" is defined as synonymous with "functional group", "moiety", "active moiety" and "reactive site".

15. Applicants (pages 10 and 11) assert the Obviousness double patenting rejections provide no reasoning for the rejection. Applicants' statement is not correct. The rejections clearly set forth that the breadth of the patented claimed subject matter and the breadth of the instant application claimed subject matter overlap and are therefore indistinct. Since the claimed subject matter is not of the same breadth and therefore directed to the same invention, which would warrant a rejection under 35 USC 101, same invention, said claims are deemed to be an Obvious variation of the subject matter of patentees claimed compositions. See remarks above regarding the scope of the instant claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S. Metzmaier whose telephone number is (703) 308-0451. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.


Daniel S. Metzmaier
Primary Examiner
Art Unit 1712

DSM